

## **REMARKS**

Applicant acknowledges and appreciates that the Examiner has removed the finality of the previous Office Action dated October 5, 2007 and the time period has been reset. Applicant also acknowledges and appreciates that the arguments provided by Applicant were deemed persuasive and new grounds of rejections have been provided in the present Office Action.

Claims 1-6, 8-31 are pending in the application. Claims 1-6, 8-12 and 21-24 are rejected. Claims 13-20 and 25-31 are objected to.

The Examiner objected to claims 1 and 21 for using the terms “comprise” and “comprising,” and “adapted to.” Amendments to claim 21 make the Examiner’s objections to this claim moot. Further regarding Examiner’s objection that “comprising” or “comprise” in a method claim further requires “the steps to,” is an incorrect assertion. A method may “comprise” various steps. There is no authority provided by the Examiner that would provide support to Examiner’s arguments. Applicant respectfully asserts that Examiner’s objection to claim 1 is erroneous and that the term “comprising” and “comprise” associated with a method step is entirely proper. Therefore, claims 1 and 21 (and their respective dependent claims—claims) are in proper form and accordingly, applicant respectfully requests that the Examiner withdraw the objection of claims 1 and 21.

### ***Claims Rejections Under 35 U.S.C. §112***

The Examiner rejected claims 1-6, 8-9, 21-31 under 35 U.S.C. 112, second paragraph, as allegedly being indefinite. Applicant respectfully traverses this rejection.

The Examiner asserts that the common practice of using the term “comprising” in relation to the term “method” in the preamble, as well as in relation to the term “said calibration” causes a lack of clarity as to the transition of the preamble. Applicant respectfully submits that it

is acceptable and common practice to modify a term in the preamble with the term “comprising” and modify another term in the claim element (e.g., “said calibration”) with another use of the term “comprising.” Each usage of the term “comprising” has its own unique function. In the case of claims 1, 9, and 21, the preamble term (e.g., “method”) is modified by “comprising,” which indicated an open ended list of elements. Further, the second use the term “comprising” relates to the open ended list of a claim element term (e.g., “said calibration”). In other words, those skilled in the art would know that the first use of the term “comprising” is the transition term and the second use of the term “comprising” and/or “comprises” relates to the claim element. Accordingly, the usage of these terms does not render the claims indefinite, and accordingly are allowable for at least the reasons cited herein. Accordingly, claims 1, 9, and 21 are allowable, and further, dependent claims 2-6, 8 & 21-31, which respectively depend from claims 1 and 21 are also allowable for at least the reasons cited herein.

#### ***Claims Rejections Under 35 U.S.C. §102***

The Examiner rejected claims 1-5, 9 and 21 under 35 U.S.C. 102(e) as allegedly being anticipated by US 20030076945 (*Huang*). In light of the amendments and argument provided herein, Applicant respectfully traverses this rejection.

Applicants respectfully assert that *Huang* does not teach, disclose or suggest all of the elements of claim 1, as amended, of the present invention. Claim 1 (as amended) of the present invention calls for determining the difference between the respective gains of the first and second portions using feedback, and modifying at least one of the gains based upon a comparison. The determination of the respective gains of the first portion and the second portion is performed respectively by a first feedback signal and a second feedback signal relating to the first and

second portions, respectively. *Huang* does not disclose determining the gain based upon any type of a feedback signal. *Huang* specifically discloses that impedances are adjusted to match respective gains of the tip and ring signals. See page 3, paragraph [0027], paragraph [0028]. The analysis described by claim 1 of the present invention is clearly not anticipated by *Huang*. *Huang* is directed to impedance matching and adjustment-type functions and not to modifying the gain. Clearly, *Huang* fails to disclose any type of a feedback-type signal to determine and adjust the gain.

*Huang* discloses that inductive and capacitive elements may be selectively connected to vary the impedance, as desired, and the adjustment of these impedances affects the gain of the circuit. See page 3, paragraph [0030]. However, no feedback is disclosed by *Huang* in determining the respective gains of first and second portions and comparing the gains to perform a calibration, as called for by claim 1 of the present invention. *Huang* simply does not disclose any such calibration process. Therefore, *Huang* does not teach, disclose or suggests all of the elements of claim 1 of the present invention. For similar reasons, the apparatus of claim 9, which calls for means for performing similar determination of the gain differences and modifying at least one of the gains, is also not anticipated by *Huang*. Therefore, for at least the reasons cited above, claim 9 of the present invention is not taught, disclosed or suggested by *Huang*. Similarly, claim 21 calls for a system that includes a line card that is capable of performing the calibration described above which, for at least the reasons cited above, is not taught, disclosed or suggested by *Huang*. Therefore, independent claims 1, 9 and 21 of the present invention are allowed for at least the reasons cited herein. Further, dependent claims 2-5, which depend from claim 1 are also allowable for at least the reasons cited herein.

### ***Claims Rejections Under 35 U.S.C. §103***

The Examiner rejected claims 10-12 under 35 U.S.C. 103(a) as being unpatentable over **Huang** in view of US Patent No. 4,910,768 (**Sues**). In light of the amendments and argument provided herein, Applicant respectfully traverses this rejection.

Applicant respectfully asserts that claims 10-12 are not make obvious by **Huang** and/or **Sues**. Applicants respectfully assert that **Huang**, **Sues**, and/or their combination do not teach or disclose all of the elements of claims of the present invention. In order to establish a prima facie case of obviousness, the Examiner must consider the following factors: 1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings; 2) there must be a reasonable expectation of success; and 3) the prior art reference(s) must teach or suggest all the claim limitations. MPEP § 2143 (2005) (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991)). In making an obviousness rejection, it is necessary for the Examiner to identify the reason why a person of ordinary skill in the art would have combined the prior art references in the manner set forth in the claims. *KSR Int'l Co. v. Teleflex, Inc.*, at 14, No. 04-1350 (U.S. 2007). Applicants respectfully submit that the Examiner has not met this burden. In fact, as provided below, Applicants illustrate that **Huang** and **Sues** are incompatible and those skilled in art would not combine them and make all of the elements of claims of the present invention obvious. Accordingly, Applicants respectfully submit that *prima facie* case of obviousness has not been established in rejecting claims 10-12.

**Huang** is directed to modifying impedance to match the gain or a tip and ring signal. **Sues** is directed to determining the amplitude and phase differences of a differential signal and

adjusting the amplitude and the phase to produce a perfectly balanced longitude signal. Although they both refer to tip and ring signals, these references are diverse that those skilled in the art would not combine them in the manner recited in the claims. *Sues* is simply not directed to the adjustment of gain called for by claims of the present invention. Therefore, those skilled in the art would not combine *Huang* and *Sues* in the manner suggested by claim 10. The Examiner failed to identify any particular reason why those skilled in the art would combine *Sues* and *Huang* in the manner suggested by claim 1 of the present invention. Accordingly, the Examiner has failed to provide a *prima facie* case of obviousness of claims 10-11.

The Examiner combined *Huang* with *Sues* to supply the missing limitation of claim 10 (limitation clearly not taught by *Huang*). However, *Huang*'s deficit due to a lack of disclosure of subject matter relating to claim 10 is not made up for by *Sues*. The Examiner admits that *Huang* does not teach the apparatus having the first amplifier connected to a tip line and the second amplifier connected to a ring line. *Sues* does not make up for this deficit. *Sues* discloses adjusting the phase and the amplitude of the longitude signal such that they are balanced, however, this does make obvious element of claim 1. See col. 4, lines 56-61. In contrast to the disclosure of *Sues*, claims of the present invention call for modifying the gain by determining the respective gains of the first portion and the second portion of a differential signal. *Sues* simply does not disclose determining any type of a gain and performing any type of adjustment of the gain. *Sues* is directed to reducing imbalance of a tip and ring signal. *Sues* discloses determining the amplitude and phase differences of a differential signal and adjusting the amplitude and the phase to produce a perfectly balanced longitude signal. See col. 4, lines 15-58. Further, as described above, *Huang* does not disclose means for determining first and second gains using

feedbacks. Clearly, the Examiner fails to point to any disclosure in *Sues* or *Huang* that anticipates the determination of a particular gain using feedbacks and modifying the gains.

Moreover, calibration unit called for by claim 10 is neither disclosed nor made obvious by *Huang* and/or *Sues*. Neither cited prior art make obvious the calibration unit that determines the difference between the gain of the first portion and the second portion of the differential signal. The simple impedance adjustment disclosed by *Huang*, in combination with *Sues*, does not make up for this deficit. Therefore, claim 10 of the present invention is not taught, disclosed or suggested by *Sues*, *Huang* or their combination. Further, dependent claims 11-12, which depend from claim 10, are also allowable for the reasons cited herein.

The Examiner rejected claims 22-24 under 35 U.S.C. 103(a) as being unpatentable over *Huang* and further in view of *Sues*. In light of the amendments and argument provided herein, Applicant respectfully traverses this rejection.

The arguments relating to claim 10 provided above also apply to this rejection. Claim 22, which also calls for a calibration unit, as described above, is not made obvious by the combination of *Huang* and *Sues*. Particularly in light of the fact that the amendment to claim 21, which calls for a feedback relating to the first and second portions to determine the gain is clearly not taught by *Huang*, *Sues* and/or their combination. The arguments relating to claim 10 provided above also apply to this rejection. Therefore, claim 22 is also allowable for at least the reasons cited above.

The Examiner rejected claims 6 and 8 under 35 U.S.C. 103(a) as being unpatentable over *Huang*, as applied to claim 1, and further in view of IEEE Standard Test Procedures for

Measuring Longitudinal Balance [*ANSI/IEEE Std. 455-1985*]. In light of the amendments and argument provided herein, Applicant respectfully traverses this rejection.

Regarding claims 6 and 8, as described above, the feedback called for by claim 1 from which claims 6 and 8 depend, is not taught by *Huang* and *IEEE Standard 455-1985*, does not make up for this deficit. The standard test procedures for measuring longitudinal balance disclosed by IEEE does not make up for the deficit of *Huang*. *IEEE Std 455-1985* is directed to a calibration relating to balancing the internal impedance of the driving test circuit. *IEEE Std 455-1985* does not disclose calibration of a gain, as called for by claims of the present invention. Simply because *IEEE Std 455-1985* discloses “calibration” does not mean that it discloses or makes obvious the calibration of the gain, as called for by claims of the present invention. Further, as described above, *Huang* is missing more than just the calibration element of the claims. Therefore, the combination of *IEEE Std 455-1985* and *Sues* do not make obvious all of the elements of claim 1 of the present invention (from which claims 6-8 depend). Further, without using improper hindsight reasoning, those skilled in the art would not combine *IEEE Std 455-1985* and *Huang* to make obvious all of the elements of claims of the present invention. The Examiner is using hindsight reasoning, in light of the claims, to combine the teachings of *IEEE Std 455-1985* and *Huang* argue obviousness of the claims. In fact, the Examiner fails to point to any motivation that one skilled in the art would have had based upon the disclosure in the cited prior art, that would lead a person skilled in the art to make obvious the elements of claim of the present invention. However, as described above, even if *IEEE Std 455-1985* and *Huang* were combined all of the elements of claim 1, and thus claims 6-8, of the present invention would not be made obvious. Further, the Examiner fails to show that there is a

reasonable expectation of success if *IEEE Std 455-1985* and *Huang* were to be combined based upon their disclosures. The Examiner failed to identify the reason why a person of ordinary skill in the art would have combined the prior art references in the manner set forth in the claims, as required by *KSR*. See *KSR Int'l Co. at 14*. Therefore, the Examiner has failed to show any one of the requirements for providing a *prima facie* showing of obviousness of claim 1 (from which claims 6-8 depend) of the present invention. Therefore, claims 6 and 8 of the present invention are not taught, disclosed or suggested by *Huang* and/or *IEEE Std 455-1985*. Accordingly, claims 6-8 of the present invention are allowable for at least the reasons cited herein.

#### ***Allowable Subject Matter***

Applicants acknowledge and appreciate that the Examiner has indicated that claims 13-20 and 25-31 contain allowable subject matter. Further, in light of the amendments and arguments presented herein, other pending claims also contain allowable subject matter and, therefore, all pending claims of the present invention are allowable.

Reconsideration of the present application is respectfully requested in view of the amendments and arguments set forth herein.

In light of the amendments and arguments provided herein, Applicant respectfully asserts that claims 1-6 and 8-31 of the present invention are allowable. Accordingly, a Notice of Allowance is respectfully solicited.

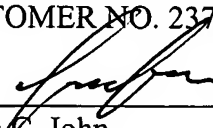


For at least the aforementioned reasons, it is respectfully submitted that all pending claims are in condition for immediate allowance. The **Examiner is invited to contact the undersigned attorney** at (713) 934-4069 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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